

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 23. (Cancelled)

24. (Currently Amended) A method, implemented using a computer system, for evaluating download performance of web pages accessible via a network, comprising the steps of:

providing at least one model to said computer system for predicting a set of download performance parameters for said web pages, said at least one model including at least one optimisation parameter;

defining, using said computer system, a set of sample web pages;

measuring, using said computer system, said set of download performance parameters for said sample web pages;

evaluating, using said computer system, said set of download performance parameters for said sample web pages on the basis of said at least one model for different values of said at least one optimisation parameter;

defining, using said computer system, an error indicative of a difference between said set of download performance parameters for said sample web pages as measured and as evaluated on the basis of said at least one model, respectively;

selecting, using said computer system, an optimised model including a value of said at least one optimisation parameter in order to reduce said error below a predetermined value;

selecting, using said computer system, a set of use web pages; and

evaluating, using said computer system, said set of download performance parameters for said selected set of use web pages on the basis of said optimised model,

wherein said at least one model includes at least one parameter indicative of at least one of the type and size of each object included in said set of sample web pages.

25. (Previously Presented) The method of claim 24, wherein said set of download performance parameters comprises at least one parameter selected from a group comprising:

download time for a given web page, and

an efficiency index indicative of how said given web page exploits the capacity of said network.

26. (Currently Amended) The method of claim 24, wherein said at least one model includes at least one parameter selected from a group comprising:

a throughput of said network, and

a round trip time of said network[[, and]]

~~at least one of a type and size of each object included in said web pages.~~

27. (Previously Presented) The method of claim 24, wherein said sample web pages are selected, using said computer system, as a statistically meaningful set of the web pages available for downloading via said network.

28. (Previously Presented) The method of claim 24, wherein said at least one model is selected, using said computer system, by taking into account at least one threshold related to operational parameters of said network.

29. (Previously Presented) The method of claim 28, comprising the step of providing in said network at least one server having a respective processing time and said at least one threshold is a function of said processing time.

30. (Previously Presented) The method of claim 24, further comprising the steps of:
defining, using said computer system, for each sample page in said set of sample pages, a partial error indicative of the difference between said set of download performance parameters for said sample web pages as measured and as evaluated on the basis of said model, respectively;
determining, using said computer system, from the partial errors defined for each sample page in said set of sample pages a global prediction error; and
selecting, using said computer system, said optimised model including a value of said at least one optimisation parameter minimising said global prediction error.

31. (Previously Presented) The method of claim 30, comprising the step of defining, using said computer system, said global prediction error as one of a mean value and a peak value of the partial errors defined for each sample page in said set of sample pages.

32. (Previously Presented) The method of claim 24, comprising the step of providing, using said computer system, different types of said at least one model for different types of said network.

33. (Currently Amended) A method, implemented using a computer system, of evaluating download times of web pages accessible via a network, comprising the step of:

evaluating, using said computer system, said download times on the basis of at least one model comprising a module for evaluating the sum of:

at least one first factor determined analytically on the basis of network (b , l) and web page (n , d , h) parameters, and

a second factor being a function of an optimisation parameter (λ),

wherein said at least one model includes at least one parameter indicative of at least one of the type and size of each object included in said web pages.

34. (Previously Presented) The method of claim 33, wherein said second factor is a function of hyperbolic type.

35. (Previously Presented) The method of claim 26 or claim 33, wherein said at least one model corresponds to the following relationship:

$$t = \left(\frac{nd}{b} \right) + \left(\frac{nh}{b} + 2l + \frac{(n-1)l}{\lambda} \right)$$

where t is the total download time of the page, n is the number of objects therein, d is the average size for its objects, b is the downstream throughput, h is the dimension of the HTTP headers, l is the network round trip time and λ is said at least one optimisation parameter.

36. (Currently Amended) A system for evaluating download performance of web pages accessible via a network, comprising at least one computer system encoded with:

first database items defining at least one model for predicting a set of download performance parameters for said web pages, said at least one model including at least one optimisation parameter;

second database items defining a set of sample web pages;

measuring tools for measuring said set of download performance parameters for said sample web pages;

a predictor for evaluating said set of download performance parameters for said sample web pages on the basis of said at least one model for different values of said at least one optimisation parameter;

an optimiser module for defining an error indicative of a difference between said set of download performance parameters for said sample web pages as measured and as evaluated on the basis of said at least one model, respectively, said optimiser module being configured for selecting an optimized model including a value of said at least one optimisation parameter able to reduce said error below a predetermined value; and

third database items indicative of a selected set of use web pages,

said predictor being configured for evaluating said set of download performance parameters for said selected set of use web pages on the basis of said optimised model,

wherein said at least one model includes at least one parameter indicative of at least one of the type and size of each object included in said set of sample web pages.

37. (Previously Presented) The system of claim 36, wherein said set of download performance parameters comprises at least one parameter selected from a group comprising:
download time for a given web page, and
an efficiency index indicative of how said given web page exploits the capacity of said network.

38. (Currently Amended) The system of claim 36, wherein said at least one model comprises at least one parameter selected from a group comprising:
a throughput of said network, and
a round trip time of said network[[, and]]
~~at least one of a type and size of each object included in said web pages.~~

39. (Previously Presented) The system of claim 36, wherein said second database items are configured for defining the sample web pages comprising a statistically meaningful set of the web pages available for downloading via said network.

40. (Previously Presented) The system of claim 36, wherein said optimiser module is configured for:

defining, for each sample page in said set of sample pages, a partial error indicative of the difference between said set of download performance parameters for said sample web pages as measured and as evaluated on the basis of said model, respectively;

determining, from the partial errors defined for each sample page in said set of sample pages, a global prediction error; and

selecting said optimised model including a value of said at least one optimisation parameter minimising said global prediction error.

41. (Previously Presented) The system of claim 40, wherein said optimiser module is configured for defining said global prediction error as one of a mean value and a peak value of the partial errors defined for each sample page in said set of sample pages.

42. (Previously Presented) The system of claim 36, wherein said first database items are representative of different types of said at least one model for different types of said network.

43. (Currently Amended) A system for evaluating download times of web pages accessible via a network, comprising:

at least one computer encoded with database items defining at least one model for evaluating said download times, said model comprising a module for evaluating the sum of:

at least one first factor determined analytically on the basis of network (b , l) and web page (n , d , h) parameters, and

a second factor being a function of an optimisation parameter (λ),

wherein said at least one model includes at least one parameter indicative of at least one of the type and size of each object included in said set of sample web pages.

44. (Previously Presented) The system of claim 43, wherein said second factor is a function of hyperbolic type.

45. (Previously Presented) The system of claim 38 or claim 43, wherein said at least one model corresponds to the following relationship:

$$t = \left(\frac{nd}{b} \right) + \left(\frac{nh}{b} + 2l + \frac{(n-1)l}{\lambda} \right)$$

where t is the total download time of the page, n is the number of objects therein, d is the average size for its objects, b is the downstream throughput, h is the dimension of the HTTP headers, l is the network round trip time and λ is said at least one optimisation parameter.

46. (Previously Presented) A computer readable medium encoded with a computer program product directly loadable into a memory of at least one computer, the computer program product including software code portions for performing the steps of any one of claims 24 to 34 when the product is run on the at least one computer.

47. (Previously Presented) A computer readable medium encoded with a computer program product directly loadable into a memory of at least one computer, the computer program product including software code portions for performing the steps of claim 35 when the product is run on the at least one computer.